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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,717	11/17/2003	Jennifer Telfer	2572-PAT	4962

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EXAMINER
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SAWHNEY, HARGOBIND S

ART UNIT	PAPER NUMBER
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2875

DATE MAILED: 04/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

W.A

<b>Office Action Summary</b>	Application No. 10/715,717	Applicant(s) TELFER ET AL.	
	Examiner Hargobind S. Sawhney	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8, 10, 12, 14 and 16 is/are rejected.
- 7) ☒ Claim(s) 4-7, 9, 11, 13, 15 and 17-25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The amendment filed on February 2, 2006 has been entered, Accordingly, claims 1, 3, 8, 9 and 14-19 have been amended.
2. The allowability of claims 14-23 indicated in the non-final office action mailed on June 23, 2005 is withdrawn in view of the newly discovered reference to Lin (US Patent No.: 5,622,425). Rejections based on the newly cited reference(s) follow.

### ***Claim Objections***

3. Claims 1-25 are objected to because of the following informalities:

Claim 1, lines 6 and 7, "center cavity, defined by a sidewall extending between said top wall and said bottom wall" is confusing, and needs to be rephrased. The above limitation does not specifically recite the structural elements having top wall, the bottom wall and the sidewall. It appears that the socket assembly-- element 28 - defines the center cavity with its walls.

Similar deficiency exists in claim 8.

Claim 1, line 6, "a side wall" should be rephrased as -- sidewalls -- as they cover front and rear portions of the socket assembly.

Claims 1 and 8 of the instant application have been examined considering the limitation "center cavity, defined by a sidewall extending between said top wall and said bottom wall" as --center cavity, defined by a sidewall extending between said top wall and said bottom wall of said socket assembly --.

Claims 2-7 and 24 are necessarily objected because of their dependency on the base objected Claim 1.

Claims 9-23 and 25 are necessarily objected because of their dependency on the base objected Claim 8.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Huang (US Patent No.: 6,299,332 B1).

Regarding 1, Huang ('332 B1) discloses a decorative string light (Figure 9) comprising:

- a power cord 21 (Figure 1, column 2, lines 26 and 27) engageable to an AC power source (not shown);
- at least one socket assembly 1 – the combination including a light bulb 2 received in a light bulb socket and a cover element 1- (Figure 9, column 2, lines 21 and 22);
- the socket assembly 1 having a top wall, a bottom wall, a center cavity, and sidewalls (Figure 9);

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- the center cavity defined by a sidewall – the side portion oriented at 3 o'clock and 9 o'clock positions -; the center cavity receiving an electrical means – bulb 2 – for light emission (Figure 9, column 2, lines 21, 25 and 26);
- means – the light bulb socket - communicating electric power from electric cord 21 to the electric means – light bulb (Figure 9);
- a transparent material – socket cover 1 (Figure 9) – diffusing and transmitting light from the light bulb (Figure 1, column 2, lines 21-26); and
- the light emitted by the light bulb 2 transmitted through the top, bottom and sidewalls of the socket cover 1 (Figure 9, column 2, line 21-26).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang (US Patent No.: 6,299,332 B1) in view of Liu (US Patent No.: 6,471,562 B1) and Lanzisera (US Patent No.: 5,495,147).

Regarding claim 2, Huang ('332 B1) discloses a decorative string light comprising an incandescent bulb as the light source. However, Huang ('332 B1) does

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not specifically teach the decorative string light including at least one light emitting diode (LED) as the light source for the device.

On the other hand, Liu ('562 B1) discloses an LED decorative light bulb 10 installable in the base of a conventional base 20 fitted in a conventional incandescent bulb holder (Figure 1, Abstract).

It would be have been obvious to one of ordinary skill in the art at the time of the invention to modify the string light of Huang ('332 B10 by providing the LED light bulbs and their positioning as taught by Liu ('562 B1) for benefits and advantages of long operating life, compactness and high energy efficiency of the light source.

In addition, regarding Claim 2, Liu ('562 B1) further discloses a pair of wires 120 and 140 communicating between the power cord 940 and the LED 10 (Liu, Figures 1 and 5, column 3, lines 50-54).

Further, regarding Claim 2, neither combined nor individual teaching of Huang('332 B1) and Liu ('562 B1) specifically discloses a circuit means limiting electric power for energizing the at least one LED.

On the other hand, Lanzisera ('147) discloses an LED light string system (Figure 2) comprising a regulated power supply 15 limiting total electrical power between minimum and maximum power levels (Figures 1 and 2, column 4, lines 20-32).

It would be have been obvious to one of ordinary skill in the art at the time of the invention to further modify the string light of Huang ('332 B1) in view of Liu ('562 B1) by providing the regulated power supplying means as taught by Lanzisera ('147) for

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benefits and advantages supplying constant current and voltage for efficient operation of the LEDs.

Regarding claim 3, Huang ('332 B1) in view of Liu ('562 B1) and Lanzisera ('147) discloses the decorative string light (Huang, Figure 9) further comprising:

- the top wall of the socket assembly 2 being removably engaged (Huang, Figure 9, column 2, lines 50-52);
- a plurality of electrical contacts 940 (Liu, Figures 1 and 5, column 1, lines 20-22);
- each of the pair of wires 120 and 140 communicating between the one of the electrical contacts and the LED 10 (Liu, Figure 2, column 3, lines 50-54);
- the LED 10 (Liu, Figure 2, column 3, line 47) mounted in the center cavity, and being removable with detachment of the cavity wall (Huang, Figure 9);

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huang (US Patent No.: 6,299,332 B1) in view of Lin (US Patent No.: 5,622,425).

Regarding 8, Huang ('332 B1) discloses a decorative string light (Figure 9) comprising:

- a power cord 21 engageable to an AC power source (not shown), and the power 21 having a first and a second wire (Figure 1, column 2, lines 26 and 27);

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- at least one socket assembly 1 – the combination including a light bulb 2 received in a light bulb socket and a cover element 1- (Figure 9, column 2, lines 21 and 22);
- the socket assembly 2 having a top wall, a bottom wall, a center cavity, and sidewalls (Figure 9);
- the center cavity receiving an electric means – bulb 2 – for light emission (Figure 9, column 2, lines 21, 25 and 26);
- means – the light bulb socket - communicating the electric power from electric cord 21 to the electric means – light bulb (Figure 9);
- a transparent material – socket cover 1 (Figure 9) – diffusing and transmitting light from the light bulb (Figure 1, column 2, lines 21-26); and
- the light emitted by the light bulb 2 transmitted through the top, bottom and sidewalls of the socket cover 1 (Figure 9, column 2, line 21-26).

Huang ('332 B1) discloses a decorative string light (Figure 9) comprising a socket assembly interconnecting the first and second wires of the power cord. However, Huang ('332 B1) does not teach a power cord including a combination of a first wire, a second wire and a third wire attached to the socket assembly as claimed by the applicant.

On the other hand, Lin ('425) discloses a string light (Figure 19) comprising:

- a power cord 5 including a first wire 5A, a second wire 5C, and a third wire 5B (Figure 19, column 7, line 44 ). The third wire 5B attached to a socket assembly 52B (Figure 19, column 7, lines 50-52);



It would be have been obvious to one of ordinary skill in the art at the time of the invention to further modify the string light of Huang ('332 B1) by providing a power cord including three wires as taught by Lin ('425) for benefits and advantages of providing series-parallel connections for a plurality of lamps, which is desirable for operational continuation when one or more of the light elements burns out.

9. Claims 10, 12, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang (US Patent No.: 6,299,332 B1) in view of Lin (US Patent No.: 5,622,425) as applied to Claim 8 above, and further in view of Lanzisera (US Patent No.: 5,495,147).

Regarding Claim 10, Huang ('332 B1) in view of Lin ('425) discloses the decorative string light (Huang, Figure 9) further comprising:

Huang ('332 B1) in view of Lin ('425) discloses a decorative string light (Figure 9) comprising incandescent bulbs connected in series between gaps in the third wire.

However, neither combined nor individual teaching of Huang ('332 B1) and Lin ('425) specifically teaches the decorative string light including at least one light emitting diode (LED) as the light source for the device.

On the other hand, Lanzisera ('147) discloses an LED light string system 13 comprising a plurality of LEDs 25 as the light source (Figures 1 and 2, column 4, line 34 and 35) electrically coupled to circuit means 23 limiting the electrical power communicated through the LEDs 25 (Figures 1 and 2, column 4, line 37 and 38).

It would be have been obvious to one of ordinary skill in the art at the time of the invention to modify the string light of Huang ('332 B1) in view of Lin ('425) by providing

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the LED light bulb string with power regulator as taught by and their positioning as taught by Lanzisera ('147) for benefits and advantages of long operating life, compactness and high energy efficiency of the light source.

Regarding Claim 12, Huang ('332 B1) in view of Lin ('425) and Lanzisera ('147) discloses a decorative string light (Huang, Figure 9) including a plurality of LEDs 25 as the light source (Lanzisera, Figures 1 and 2, column 4, line 34 and 35). However, neither combined nor individual teaching of Huang ('332 B1), Lin ('425) and Lanzisera ('147) specifically teaches the LEDs being inverted in mounting position.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the decorative string light of Huang ('332 B1) in view of Lin ('425) and Lanzisera ('147) by orienting the LEDs in inverted position, since it has been held that rearranging parts of a prior art structure involves only routing skill in the art.

Regarding claim 14, Huang ('332 B1) in view of Lin ('425) and Lanzisera ('147) discloses a decorative string light (Huang, Figure 9) including at least one socket assembly 52B attached to the third wire 5B, and the first wire 5A and second wire 5C engaged to the side wall of the socket assembly 52B (Lin, Figure 19, column 7, lines 47-52); the third wire 5B including a plurality of connections engageable to the LEDs (Lanzisera, Figures 1 and 2, column 4, line 34 and 35) in series electrical connections (Lin, Figure 19).

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Regarding claim 16, Huang ('332 B1) in view of Lin ('425) and Lanzisera ('147) discloses a decorative string light meeting the limitations in similar manner as that applied to claims 14 and 10 detailed above.

***Allowable Subject Matter***

10. Claims 4-7, 9, 11, 13, 15, 17-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record, including Huang ('332 B1), Gibboney ('313 B2), Lin (US Patent No.: 5,622,425) and Lanzisera ('147), does not show or suggest the applicant's invention as claimed. Specifically, the prior art of record does not disclose a decorative string light combining:

- a transparent or substantially translucent casing attached to and encasing a substantially transparent or translucent the socket assembly as recited in each of claims 4, 5 and 9;
- a locking engaged through the bottom wall of the socket assembly as recited in each of claims 18 and 20;
- current-flow interrupting means interrupting current flow for longer durations when the voltage is higher, and for shorted duration when the voltage is lower as recited in each of claims 22 and 23;

The above-indicated combination, including at least one socket including fractionally engaged first, second and third wires, is unique.

Neither combined nor individual teaching of Huang ('332 B1), Gibboney ('313 B2), Lin (US Patent No.: 5,622,425) and Lanzisera ('147) discloses an illumination device including:

- a transparent or substantially translucent casing encasing a substantially transparent or translucent the socket assembly; and
- current interrupting means interrupting current, in the third wire, for the duration proportional to the voltage during the AC cycle.

Therefore, claims 4, 5, 9, 18, 20, 22 and 23 are objected over prior art.

Claims 6 and 24 are necessarily objected because of their dependency on the objected base Claim 4.

Claim 7 is necessarily objected because of their dependency on the objected base Claim 5.

Claims 11, 13, 15, 17, 19, 21 and 25 are necessarily objected because of their dependency on the objected base Claim 9.

Claim 21 is necessarily objected because of their dependency on the objected base Claim 17.

### ***Response to Amendment***

11. Applicant's arguments filed on February 2, 2005 with respect to the 35 U.S.C. 102(b) rejection of claim 1 has been fully considered but they are not persuasive.

Argument: Huang (US Patent No.: 6,299,332 B1) does not teach a light socket assembly having top, bottom defining a cavity as recited in Claim 1.

Response: As detailed in section 5 of this office action, Regarding 1, Huang ('332 B1) discloses a decorative string light (Figure 9) comprising:

- the socket assembly 2 having a top wall, a bottom wall, a center cavity, and sidewalls (Figure 9); the center cavity defined by a sidewall – the side portion oriented at 3 o'clock and 9 o'clock positions -; and the center cavity receiving an electric means – bulb 2 – for light emission (Figure 9, column 2, lines 21, 25 and 26).

Thus, Huang ('332 B1) discloses a decorative string light, which meets all limitations of claim 1, and supports the 103(a) rejections of all other claims as discussed above.

### ***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hargobind S. Sawhney whose telephone number is 571 272 2380. The examiner can normally be reached on 8:15 - 4:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571 272 2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

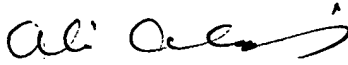
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HSS 4/22/2006

  
**ALI ALAVI**  
**PRIMARY EXAMINER**